

**Testimony presented before the
House Great Lakes and Environment Committee
by Christy McGillivray, Clean Water Action Michigan Campaigns Director
March 5, 2009**

Good morning, Chairwoman Warren and Members of the Committee. Thank you for the opportunity to speak to you today. My name is Christy McGillivray and I'm the Michigan State Campaigns Director for Clean Water Action. I am here today representing our more than 235,000 Michigan members who are committed to protecting Michigan's environment and preventing health-threatening pollution. Many of you heard testimony from Clean Water Action on the issue of Lindane back in 2008, and restricting the use of pharmaceutical Lindane remains a top priority issue for Clean Water Action and our members across the state. We were pleased that a bill identical to HB 4402 passed the House last year with strong bi-partisan support, including from many members of the Committee. As stewards of the Great Lakes ecosystem, we are charged with the important duty of striving to ensure we protect our most prized natural resource and our most vulnerable population – children – from the impacts of toxic chemicals.

This Committee heard testimony last week from Dr. Ted Schettler, an expert on the dangers of environmental toxicants. Among the other chemicals he mentioned, there is substantial evidence for restricting the use of Lindane-containing pharmaceuticals on the basis of protecting children's health. Today we want to clarify the risks that Lindane poses to our water and environment, and speak to the success of the 2002 California ban on the use of pharmaceutical Lindane. As noted in the FDA's stern warning letter to Morton Grove Pharmaceuticals, "Lindane Shampoo is plainly labeled as second line treatment, suitable only when other, safer treatments fail or are not tolerated." HB 4402 does not ban pharmaceutical use of Lindane, but applies common-sense restrictions consistent with FDA guidelines.

As a reminder, Lindane is toxic to humans and the environment starting with the initial manufacturing process. For every ton of Lindane that is produced, between 6 and 10 tons of toxic waste byproducts are generated. (1) It is estimated that between 2 and 4.8 million tons of hexachlorocyclohexane waste by-products are present worldwide. (2) These waste products are highly persistent chlorinated compounds and thus there is no easy and effective way to remediate

sites of production, creating a costly and hazardous situation.

As you have heard before, Lindane is classified by the U.S. EPA as a "Priority Pollutant" under the Clean Water Act "for the protection of aquatic life and human health in surface water." (3) Lindane is also classified as one of the twenty-two "Bioaccumulative Chemicals of Concern" in the Great Lakes. (4) That designation is supported by "continuing evidence that the highly bioaccumulative nature of these toxic chemicals presents a significant potential risk to human health, aquatic life and wildlife." (5) Michigan's Department of Natural Resources recognizes that organochlorine pesticides including Lindane "are not degraded by natural biological processes and become a permanent part of the environment." (6) Since many of these warnings apply to both agricultural and pharmaceutical uses of Lindane, it's very encouraging that all agricultural uses of Lindane have been withdrawn in the U.S. and in many countries. However, the danger from pharmaceutical use of Lindane remains.

It is true that thanks to many of the warnings by government agencies and Medicaid restrictions on Lindane use in Michigan, prescription use of Lindane is declining, but it is also indisputable that Lindane continues to enter the environment from pharmaceutical uses. This Committee has previously heard testimony which explicitly claimed that "Lindane is not detectable in Michigan's fish, drinking, surface water, wastewater, soil, sediment or air." (11) This appears to be false according to sources like the U.S. Geological Survey and the National Oceanic and Atmospheric Administration that are cited in the "Lindane in the Great Lakes" factsheet that you have received. The 2007 "State of the Great Lakes" report shows that Lindane was "routinely found" in Lake Ontario, commonly found in Lake Huron, and detected in Lake Erie. Lindane was also found in sediments in the St. Clair River and in Paint Creek in the Lake St. Clair watershed in monitoring done by the U.S. Geological Survey in partnership with the Lake St. Clair Regional Monitoring Project from 1990-2002. Lindane has also been measured in the tissues of mussels throughout the coastal U.S. and Great Lakes as recently as 2005 by the National Oceanic and Atmospheric Administration's National Status and Trends Program. (7) Lindane is in our water, it's in our soil, and in our wildlife. As a bioaccumulative pollutant, *any* detection of Lindane in Michigan's water and wildlife should be of concern. HB 4402 puts

reasonable restrictions in place to help minimize the health and environmental dangers potentially caused by the use of Lindane-containing products.

Additionally, Lindane is a known contaminant in municipal wastewater. When used as treatment for head lice or scabies, Lindane containing shampoos and lotions are washed down the drain and into wastewater. Unfortunately, Lindane can pass through the wastewater treatment plant and end up downstream in lakes and rivers. (8) It is of paramount concern, then, that the Los Angeles County Sanitation Department calculated that “a single treatment for head lice, when rinsed down the drain, contributes enough Lindane to bring 6 million gallons of water over certain regulatory standards in California.” (9) This calculation was done simply to make the point that a small amount of Lindane can have an impact on a large amount of water. Here in Michigan, Lindane has been detected in residuals from the Detroit Water and Sewerage Department most recently in 2002 and 2003 and in leachate in 2004. Lindane was regularly detected in residuals until 2003, but residuals are no longer tested for Lindane. Since 2003, leachate from sewage sludge is only tested once per year, making it harder to detect fluctuations in Lindane levels at the facility.

Thankfully, safer, effective alternatives to pharmaceutical Lindane exist, including non-chemical methods. As you may recall, California’s ban on the use of Lindane for treating head lice and scabies took effect in 2002. Not surprisingly, when wastewater across California was tested four years after implementation of the ban, Lindane concentrations declined from well above the California standard in 2000 to virtually undetectable concentrations in 2006. (10) This is clear evidence that Lindane restrictions resulted in improved water quality. Michigan sits in the middle of twenty percent of the world’s freshwater. However, we would effectively be rolling back four decades of efforts to protect water quality from contamination with chemicals if we are to assume in preparing risk assessments that it is fair to theoretically dilute chemicals of concern in the volume of the *entire* Great Lakes watershed,. HB 4402 is meant to ensure that Lindane is used only when absolutely necessary, as recommended by the FDA. This will minimize the introduction of Lindane into our environment, especially important since some wastewater treatment facilities in Michigan do not routinely test for Lindane.

The reality of what we're talking about here is this: Lindane is washed down the drain and into our lakes and rivers. We don't know exactly when and where. We do know that it is toxic to humans and wildlife from its inception and that it accumulates in the environment. Why do we continue to perpetuate these dangers? As representatives elected by the people of this state, you are charged with the responsibility and authority to protect the Great Lakes. It is a simple choice of a cautious approach to protecting the State you serve from a known toxic chemical, or siding with a foreign-owned company out to protect its own bottom line. How will we be judged if we do not act now in the face of the risks posed by pharmaceutical use of Lindane? We must take a precautionary approach to protecting the world's greatest freshwater resource and Michigan's children.

Thank you for listening to our comments this afternoon. We look forward to your support of HB 4402.

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